

figured in the 'Illustrated London News,' October 28, 1848, from the original American memoir, by no means satisfies the conditions of the problem. Neither do the *Saccopharynx* of Mitchell, nor the *Ophiognathus* of Harwood—the one $4\frac{1}{2}$ feet, the other 6 feet long; both are surpassed by some of the congers of our own coasts, and, like other murænid fishes and the known small sea-snakes (*Hydrophis*), swim by undulatory movements of the body.

The fossil vertebræ and skull which were exhibited by Mr. Koch in New York and Boston as those of the great sea-serpent, and which are now in Berlin, belonged to different individuals of a species which I had previously proved to be an extinct whale; a determination which has subsequently been confirmed by Professors Müller and Agassiz. Mr. Dixon, of Worthing, has discovered many fossil vertebræ in the Eocene tertiary clay at Bracklesham, which belong to a large species of an extinct genus of serpent (*Palæophis*), founded on similar vertebræ from the same formation in the Isle of Sheppey. The largest of these ancient British snakes was 20 feet in length; but there is no evidence that they were marine.

The Sea Saurians of the secondary periods of geology have been replaced in the tertiary and actual seas by marine mammals. No remains of Cetacea have been found in lias or oolite, and no remains of Plesiosaur, or Ichthyosaur, or any other secondary reptile, have been found in Eocene or later tertiary deposits, or recent, on the actual sea-shores; and that the old air-breathing saurians floated when they died has been shown in the 'Geological Transactions' (vol. v., second series, p. 512). The inference that may reasonably be drawn from no recent carcase or fragment of such having ever been discovered, is strengthened by the corresponding absence of any trace of their remains in the tertiary beds.

Now, on weighing the question, whether creatures meriting the name of "great sea-serpent" do exist, or whether any of the gigantic marine saurians of the secondary deposits may have continued to live up to the present time, it seems to me less probable that no part of the carcase of such reptiles should have ever been discovered in a recent or unfossilized state, than that men should have been deceived by a cursory view of a partly submerged and rapidly-moving animal, which might only be strange to themselves. In other words, I regard the negative evidence, from the utter absence of any of the recent remains of great sea-serpents, krakens, or Enaliosauria, as stronger against their actual existence than the positive statements which have hitherto weighed with the public mind in favour of their existence. A larger body of evidence from eye-witnesses might be got together in proof of ghosts than of the sea-serpent.

Description of a new species of Smynthurus (S. baulastinus).

By J. HARDY, Esq.

This small species of *Smynthurus* was very abundant upon the leaves of potatoes and other plants in gardens, deriving its sustenance from their sap. The leaves, apparently in consequence, had numerous minute black spots dispersed over their surface, and to it, while the

aphis theory raged, was ascribed, in a provincial paper, the blackening of the potato leaves which accompanies the potato disease, and forms its external symptoms. It is a minute insect, about the size of a small pin-head; the head is small and rounded; the body, consisting of the thorax and abdomen confounded in a single mass, oval or subquadrate, broadest behind, and looking as if the insect wore a cloak. The head, the general colour of the body above, and its apex are light yellow, and there is an orange cloud or some irregular maculæ of that colour posteriorly; the body is very pale beneath, as are the legs and antennæ; and there are six white spots (or fewer), three on each side behind the posterior legs; the head is slightly dusky in front, and the eyes are black. It is furnished beneath with a leaping-fork, of a pellucid white, which is fastened behind, and lies along the belly in a state of repose; but, by projecting it backwards at will, the insect is propelled forwards with a rapid jerk. It usually falls on its back, and takes some time to recover its upright position, which after a struggle it often does by seizing some adjacent object with its legs. It runs rather quickly.—*From the Gardeners' Chronicle for Nov. 18.*

The Liquidamber Tree of the Tenasserim Provinces.

By the Rev. F. MASON.

“Did you ever see in this country the tree which produces the balsam of tolu?” a gentleman once asked the writer. “I never did,” was the reply. “I have one in my compound,” he continued; but unfortunately his compound was two hundred miles distant. Years passed away and I found myself beneath this tree in flower, and soon discovered that it was not *Myrospermum toluiferum*, but *Liquidamber altingia*; and that it produced, not balsam of tolu, but liquid storax.

The tree is indigenous on the coast, and in some sections is quite abundant. A considerable stream in the province of Mergui derives its name from this tree, in consequence of its growing so thick on its banks. It seems to have escaped the notice of Dr. Helfer, for, if I recollect right, it is not once alluded to in any of his reports, nor has it ever been brought to notice by any one; if we except a Catholic priest, a resident of Rangoon, who has introduced it in a little Burmese medical treatise that was lithographed a few years ago by Cól. Burney, who took a lithographic press with him into Burmah.

The Padre seems however to have been ignorant of botany, for he describes it as the tree which produces the balsam of Peru (*Myrospermum peruiferum*), and which belongs to a different natural family. The medicinal properties of their exudations too are materially different. Liquid storax, the production of this tree, is described by Lindley merely as “a stimulating expectorant substance—influencing the mucous membranes, especially that which lines the air-passages.” The writer of the Burmese medical treatise recommends the exude of the tree for the usual purposes to which the balsam of Peru is applied, under the delusion that it is the same substance!

Here is a fine illustration of the fallacies of medicine. It is probable that this substance has been used in all the various cases many